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## **Moving, Containing, Displacing: the Shipping Container as Refugee Shelter**

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Modified containers or ‘caravans’ have been used as temporary refugee housing in countless situations of mass displacement – whether due to forced migration or natural disaster. This is not surprising given their relatively low cost and durability, as well as their ease of transport, setup, modification and eventual removal. In this chapter, I analyse the container shelter by examining its origins as a core infrastructure of global trade. The shipping container is mainly distinguished from other forms of prefabricated emergency shelter by its adherence to ISO standards. Its standardized size, stackability and corner fixtures allow for numerous possibilities of modular combination and enable seamless transport across air, sea and land. Due to its original use as an infrastructure of commercial exchange, indeed one which reshaped the international economy, the shipping container used as refugee shelter also provides an occasion to investigate the links between global and urban regimes of im/mobility.

I argue that shipping containers act as an infrastructure that facilitates the movement and redistribution of people across space using the example of container villages, the so-called ‘Tempohomes’ created in Berlin to accommodate large numbers of refugees and asylum seekers who have arrived in the city since 2015. I highlight the capacity of containers, on the one hand, to redistribute goods and wealth and, on the other, to contain and displace populations. As a form of shelter, containers are sturdy enough to form a first step in the process of settling people, but also flexible enough to move them elsewhere, or be removed entirely if no longer needed. This dual material quality of permanence and mobility makes container shelters an ideal technology for distributing, and redistributing, refugees and asylum seekers in response to fluctuating refugee policies.

### *The shipping container as an infrastructure of global trade*

The integration of the movement of goods across various surfaces and modes of transport – from freight ship to train to flatbed truck to plane – caused the so-called ‘intermodal’ container to revolutionize the shipping industry from the 1960s onwards. In integrating trade across the ‘transitional zone’ of the coast (Martin 2013), the standardized shipping container was able to minimize the time-consuming and costly process of loading and unloading ships and thereby decrease the cost of maritime shipping substantially (Levinson 2006; Martin 2016). Not only did it increase the speed and rate at which goods moved across the globe, but the price of goods was no longer linked to the distance they had travelled, leading to what Harvey (1989) has called ‘time-space compression’. The shipping container thus became a ‘key innovation’ facilitating economic globalization (Harvey 2010).

The worldwide standardization of shipping containers by the International Organization for Standardization (ISO) increased the scale of change by many magnitudes. Currently over 33 million ISO containers are in operation worldwide (World Shipping Council n.d.). The adoption of the so-called Twenty-foot Equivalent Unit<sup>1</sup> as industry standard (in recent years replaced by the Forty-foot Equivalent Unit) might be considered the real building block of the global ‘space of flows’ (Castells 1999). In mobility studies, ‘moorings’ are conceived of as the immobile infrastructures that enable flows (Hannam et al. 2006), but in the case of containers, the movement

is facilitated by an element that is itself mobile. Furthermore, in addition to the steel cubes themselves, we might see the immaterial standard specifications applied to them as the infrastructure of globalization (cf. Bowker and Starr 1999; Easterling 2014). Containers thus function as both a ‘hard’ and a ‘soft’ infrastructure: they ‘mediate exchange over distance’ and thus form the ‘base on which to operate modern economic and social systems’ (Larkin 2013: 330) though their physical apparatuses as well as their adherence to a common set of norms and processes.

The shipping container not only spurred a massive increase in international trade, with world seaborne trade trebling between 1975 and 2015 to 1.75 billion metric tons (UNCTAD 2015). It also resulted in the redistribution of centres of commerce through the ascendancy of new economic powers such as Japan, and new port cities such as Busan, Korea (Levinson 2006: 271). *Within* cities, too, it shifted the focal points of economic activity. Urban ports were severely affected by the rise of container shipping, not only because longshoremen were no longer needed in the close-to-automatized processes of loading and unloading cargo. Due to the much higher volumes of goods moving through ports, and the possibility of storing containers *in situ*, more space was needed than inner-city ports could offer. Many urban docksides and waterfronts thus declined as ports moved elsewhere (Martin 2016: 55ff). The container, then, both moves goods and redistributes the profits from those goods and movements, boosting some spaces by linking them into the international network of exchange, and causing the decline of others.

In addition, the shipping container is deeply embroiled with technologies of both war and humanitarianism. As Levinson (2006: 186ff) details, the Vietnam War marked a turning point for the expansion of global container-based trade. The US military fully adopted this system for moving its cargo across the world, indirectly igniting Japan’s economic ascendancy, as it became profitable to fill empty containers on US war ships in Japan as they returned from Vietnam on their way to California. Logistics has grown due to the just-in-time manufacturing and shipment flows that developed in the wake of containerization, but it is originally a military discipline that has become a core determinant of corporate success. Not only are corporate logistics based on martial precedents, but current supply chains relying on the orchestration of countless complex flows are highly securitized, and even defended with military might (Cowen 2014). At the same time, humanitarian logistics often use the same sites, paths, expertise, and sometimes even personnel, as their military counterparts (see Attewell 2018, Khalili 2018, Ziadah 2018) – with aid and reconstruction following in the footsteps of destruction, completing a circle of profit. Ticktin (2016) notes the dehumanization at work when people are forced to live in vessels made for commercial goods. When refugees are sheltered in shipping containers, their position in the context of these wider circulations is brought into sharp relief.

### *Berlin’s Tempohomes*

In 2015, following the arrival of close to one million refugees in Germany, thousands of people were housed in emergency shelters that included office buildings, barracks, factories and gymnasiums. While 55,000 were housed in such shelters in Berlin at the peak of the so-called ‘crisis’, by mid-2018, only 900 individuals remained in these temporary situations (Abel 2018). In lieu of a permanent housing solution, shipping containers had been converted to residential units, called Tempohomes. These were intended to serve as shelters for an intermediate period of a maximum of three years – a short-term solution permitting the circumvention of regular planning laws.<sup>ii</sup> The State of Berlin’s call for tender specified that shelters should be ‘20-foot standard containers’, corresponding to the ISO norm (State of Berlin 2016).

Berlin’s borough of Pankow explained the choice of container shelters as follows: ‘The mobile accommodations can be set up quickly, have a good standard, are relatively inexpensive and can be converted and used elsewhere if required’ (Stiftung SPI 2015). However, the agency

in charge of Berlin's refugee affairs also acknowledged that moving Berlin's refugees into another temporary form of housing, after they had lived in emergency shelters without privacy, and often for years, was 'not ideal' and 'provisional' (Landesamt für Flüchtlingsangelegenheiten 2017). In an official communication, it explains that the 'strain' on the city's housing market is to blame for the fact that only 3,500 refugees found accommodation in regular flats in 2017 (Ibid.) – a number that decreased to just over 2,000 in 2018 (Berlin Senate 2019). Property prices in the city increased by twenty per cent in 2017 – the highest rate worldwide (Knight Frank 2018), leaving Berlin with a lack of affordable housing.

While the city's initial plan was to erect thirty container villages made up of Tempohomes in order to house a total of 15,000 people, these targets were later lowered to seventeen sites with accommodation for 5,300 people, in part because fewer asylum seekers were arriving, and in part because of the higher than anticipated cost of the shelters. The left-of-centre coalition that took over Berlin's state government in late 2016 claimed that this downward correction reflected its policy priority of avoiding housing refugees in containers, but the previous right-of-centre coalition had in fact already reduced the scale of the plan because of the high number of asylum seekers in Berlin who were gaining refugee status (Berliner Zeitung 2016). The new plan provides for medium-term Modular Accommodation for Refugees (*Modulare Unterkünfte für Flüchtlinge* – MUFs) to be built in fifty-three sites, suggesting that Tempohomes served mainly as an interim solution for those whose asylum claim had not been processed.

A typical Tempohome site consists of 244 containers arranged in single-storey configurations. Five hundred people are housed in sixty-four flats across eight accommodation buildings, with each flat made up of three containers. In addition, there are two buildings for communal activities and administration (twenty-four containers each) and one four-container unit for a 'porter' or security guard (Senatsverwaltung für Gesundheit und Soziales 2016). Externally, the appearance of the sites is often bare, with amenities such as greenery and playgrounds only added after refugees moved in. Internally, the flats, consisting of three containers, offer 45 m<sup>2</sup> of space for four to eight individuals – meaning 11.25 to 5.6 m<sup>2</sup> per person. This is still above the minimum standard in humanitarian response, specified as 3.5 m<sup>2</sup> per person (Sphere Project 2011), but well below the Berlin average of 40 m<sup>2</sup> (*Der Spiegel* 2015). More significantly, the ceiling height of just 2.2 m is quite low.

Each flat includes a small washroom with a shower, and a pantry kitchen including an oven/stove and refrigerator. While basic furniture items including beds, tables and cupboards are provided, sites do occasionally lack essential furniture. For instance, while 30 per cent of residents at the communal Tempohome accommodation at Finckensteinallee in Steglitz-Zehlendorf are infants and toddlers, no baby cots were included in the original setup, and the State Office for Refugee Affairs took some time to approve the additional items (German Red Cross 2018). Therefore, the visual impression related by residents of the surrounding neighbourhoods, therefore, ranges from 'sparse and functional' (*Berliner Kurier* 2017a) to 'dismal' and 'bleak' (*Berliner Kurier* 2017b). While some Tempohome residents have expressed relief at the increased degree of privacy – as anything was perceived as better than living and sleeping in a gymnasium with hundreds of strangers – many others complained of the lack of privacy due to the density of accommodation and the lack of sound insulation and visual barriers between units (Vey 2018: 38-39). In addition, being fenced in, especially in an area used for leisure activities such as the former airfield of Tempelhof Airport, made one boy fear he would be stared at as if he were in a zoo (Frühauf n.d.).

### *Containment, (re)distribution and displacement*

As Katz (2015, 2017) notes, camps can be used for both 'concentrating' and 'spreading' populations – and this is true for container camps as well. The qualities of the shipping container

can impact the spatial position of refugees in the city in both ways. On the one hand, when container villages are placed in low-density environments and sequestered off by physical obstacles and administrative barriers – albeit for security reasons – this serves to isolate and contain their residents. On the other hand, when they are linked to existing urban infrastructures, container shelters can serve as a first step to integrating refugee housing into the wider urban fabric. However, this kind of dispersal can also hinder integration. The provisional nature of the shelter makes the container an ideal technology to distribute (and redistribute) refugees across the city in line with changing administrative and policy requirements, undermining the development of local ties.

The outside of the shipping container, as a standardized form of packaging, rarely reveals the assemblages of items and materials inside (unless they spill out). To contain, then, is to shield something from public view, but also to stop it from permeating into that public. Most of the seventeen Tempohomes sites are outside central Berlin (with only a handful within, or near, the S-Bahn Ring around the urban core). This is in part because large empty plots are required to build the single-storey villages – approximately 12,000 m<sup>2</sup> for a standard site housing 500 people. A ‘double site’ accommodating one thousand refugees, such as Elisabeth-Aue in Pankow, requires 26,000 m<sup>2</sup>. This site takes up a small portion of a large field near an area of single-family homes and is visually separated from the main road and built-up area by a row of trees. Fences surround the perimeter of each site and, while residents may receive visitors, visits must be pre-announced and approved (Dalal et al. 2018). This security arrangement is explained as based on the need to protect refugee accommodations. In 2017, there were close to 2,000 attacks on refugees across Germany, resulting in 300 injuries, as well as over 300 attacks on refugee shelters (*Der Spiegel* 2018), twenty-six of which took place in Berlin (Pro Asyl 2017). Due to the securitisation and the threat it reflects, it is perhaps not surprising that Tempohome residents complain of their isolation from their surroundings and, based on this, from German society at large (Vey 2018: 51). Even if the intention is to protect inhabitants from outsiders, the effect is also to contain refugees and minimize their interaction with the city around them.

Yet efforts have also been made to ensure the spatial integration of Tempohome residents in the city. Locations for Tempohomes were selected in a thorough process that was not only concerned with availability of space and technical feasibility. Instead, links to social as well as ‘hard’ infrastructures were evaluated. For instance, the decision to build the Refugium Buch site in the Karow neighbourhood of the borough of Pankow, rather than using existing buildings, considered the proximity to schools, child day care centres, shops and hospitals, in addition to transport links and the burden on water and electricity networks (Pankow council 2015). Further, some of the Modular Accommodations for Refugees (MUFs) will be built in locations adjacent to the Tempohomes, suggesting that there is a longer-term plan for settling and spatially integrating residents. As politicians never fail to note, the MUFs, made from prefabricated concrete modules and with a lifespan of eighty years, can be added to the Berlin property market when they have outlived their purpose as refugee housing. In the MUFs, up to 500 people will be living in close quarters in one building (Abel 2018), at times in sparsely populated areas in which they will outnumber local residents (*Berliner Morgenpost* 2018), suggesting that the effect of concentration and containment will remain a challenge in the longer term.

A key factor in the decision for Berlin to invest some seventy-eight million Euros in Tempohomes (Landesamt für Flüchtlingsangelegenheiten, n.d.) was the ease with which the containers could be moved to the desired locations. One supplier of containers for refugee shelter, a Dutch company called TempoHousing (2015), notes the versatile possibilities of delivering its shelters based on the twenty-foot ISO container: ‘by sea, road and train’. Highlighting the shipping origins of its containers, TempoHousing (2010) explains their advantages as housing for displaced people in various humanitarian situations in a company brochure: ‘modules are shipped world wide - by truck to the construction site - with a simple crane building is set up [sic]’. It continues: ‘All modules comply with international transport standards and with international building codes,

to get the best of both worlds: easy to transport to everywhere and simple to construct a building.’ Thus, as in global trade, the container’s movability, enhanced by standardisation, is key in the context of refugee shelters, too. The container reveals its ability to distribute and redistribute – in this case, people rather than goods. Utilized as housing, its modular nature enables easy expansion, recombination and eventual removal. From the point of view of the state, this makes it a suitable means of housing displaced people even over longer periods of time: the shelter situation can be altered in order to adapt to site specificities as required by the urban context and can respond to shifting policy priorities and directions.

In Berlin, such shifts include the potential (re)distribution of refugees across boroughs or states, in line with updated ‘burden-sharing’ agreements. As there is within the European Union, there is constant debate among Germany’s federal states and Berlin’s districts regarding the distribution of refugees. In Germany, the *Königssteiner Schlüssel* formula is employed to calculate the distribution of asylum seekers based on each state’s population and tax payments. However, the formula does not consider the availability of living space as a factor, meaning that higher quotas are assigned to city-states like Berlin, which was allocated around 5 per cent of all refugees between 2017 and 2019 (Bundesamt für Migration und Flüchtlinge 2019). In the debate over this, alternative models suggest moving refugees and asylum seekers to allow a ‘fairer’ distribution from the point of view of ‘overburdened’ federal states like Berlin (Gerl et al. 2016).

Within the city, initial distributions were made according to the availability of space for emergency shelters (Berlin Senate 2016), resulting in unequal distribution, and debates on what a ‘fair’ share would be. Administratively, responsibility was then allocated based on individuals’ birthdates, which meant that many asylum seekers had to attend official appointments in a different office from their family members, and sometimes had to travel long distances. Furthermore, local officials in their assigned district were often unfamiliar with the resources in their area of residence. Because asylum seekers often do not have papers or recorded birthdates, many listed January as their birthdate. As a result, the district of Mitte was allocated a disproportionately high number of refugees, share that then had to be corrected, meaning a renewed reallocation (Fahrun 2018). As such, the temporary nature of the shelters, and the possibility of moving them, appear well-suited to a situation in which governmental responsibility is constantly reshuffled.

In addition to their ability to contain and (re)distribute displaced populations, containers can also act as harbingers of forthcoming displacement. As part of the trend in ‘sustainable’ small-scale architecture (Roke 2016), shipping containers have increasingly been used for other urban purposes besides emergency shelter. There are an estimated 500,000 idle shipping containers, especially in the United States. In light of reports of a large ‘surplus’, trade organisations such as the ISBU Association have been advocating for the reuse of containers for various purposes, including as homes (ISBU n.d). The shipping container as housing or commercial space conveys the impression of ‘upcycling’ (despite the fact that most containers used for these purposes are new or heavily cleaned and refurbished), appealing to proponents of urban sustainability. At the same time, it encapsulates the aesthetic of a revitalized industrial waterfront as well as that of ‘pop-up’ urbanism, both associated with gentrification.

The Platoon Kunsthalle Development Center, a commercial art space made up of stacked containers, has been set up in different sites across Berlin since 2002 and has subsequently expanded to Seoul and Mexico City. The company’s name and its olive green colour serve as reminders of the container’s military history, but the producer of the containers mainly creates temporary sites for the purpose of promoting luxury brands. Similarly, temporary leisure and commercial and leisure spaces made up of containers have been set up in unused lots in cities across the world, with shops, bars and restaurants promising revitalization through a bourgeois version of urban informality. In London, food and retail parks such as Boxpark Shoreditch and PopBrixton draw a predominantly white middle-class clientele, despite the diversity of the surrounding neighbourhoods and have become symbols of gentrification. Yet shipping containers

are also touted as affordable housing for students and people on low incomes. In Brighton, a metal scrap yard was repurposed when the Richardson's Yard homeless shelter, made of shipping containers, was set up on its site. Isolation and the lack of security were seen as problems by residents (Rippingdale 2014), but the shelter was only ever intended for temporary use. The longer-term plan was to utilize the site's new aesthetic to attract creative industries that would become permanent tenants (Brighton & Hove City Council 2009).

The supposedly temporary repurposing of an area through 'meanwhile use' urbanism embodied in container retail parks and housing may result in its longer-term spatial change. In their function of developing and attracting new groups to supposedly underexploited urban sites, containers thus also embody the potential displacement of existing residents. Like Tempohomes, these other urban container spaces function almost like Special Economic Zones on an urban level: their temporariness denotes exceptional regimes where planning processes are bypassed to house people on an ad hoc basis or to 'revitalize' a neighbourhood. In Berlin, Tempohomes are also a response to ongoing gentrification and the rise in housing costs across the city, especially due to foreign investment. On the other hand, MUFs, their longer-term cousins, might be seen as urban development tools where interim use by refugees is merely one step on the way to densifying and reconfiguring an urban area. Again we see how containers are not only used to move objects, and thereby redistribute wealth, but also to redistribute populations across the city, channelling their flow in line with the requirements of capital.

The crowded and bare living conditions of the Tempohomes ensure this form of interim housing is not too comfortable for residents. Because the container housing is often isolated, the refugee 'problem' appears to be contained. The mobile and temporary architecture of the containers allows for the possibility of the large-scale return of their inhabitants to their home countries. While Tempohomes are justified as quick solutions, they reflect a lesser commitment to permanent settlement that would involve spatial integration and long-term housing solutions. But shipping containers are not by nature isolating, as we have seen in other uses of their typology: they can also be used to settle groups in new locations and may also have displacing effects. They are an infrastructure that can both contain and distribute, exclude or expand. The question then arises as to why Berlin's 'container villages' were planned on such a large scale, and in so segregated a fashion, that isolation was bound to result.

### *Conclusion: the shipping container and global im/mobilities*

We know that globalization does not mean the end of nation states or borders. While enhanced mobilities facilitate the movement of goods and the 'kinetic elite' (Cresswell 2006) across boundaries, the movement of less desirable subjects is curtailed through mobility regimes (Shamir 2005). Yet there is not only a 'mobility gap' (Turner 2006) in the sense that some goods and groups are less mobile than others. Rather, the mobility of some people and goods is *predicated* on the containment of those immobilized and contained others. And indeed, the forced migration of some can be viewed as a result of the 'free' movement of global markets; poverty and displacement are 'expulsions' due to resource extraction, climate change and the financialization of housing (Sassen 2014). Some nonhuman cargo is deemed so valuable that military violence is employed to protect the supply chain, potentially causing displacement. At the same time, *people* transported on boats in the Mediterranean are not consistently deemed worthy of rescue when their vessels capsize and they are left to drown.

The shipping container participates in both processes: the seemingly boundless movement across the surface of the earth, and the containment and management of those who wish to move, often as a result of the unequal effects of globalization. In acting as a tool for the redistribution of goods and people across space on a grand scale, the shipping container can create temporal, spatial and political transitional zones that are not just useful for optimizing global (and local) trade and

value extraction, but also to manage their fallout. While social scientists often focus on the immaterial and deterritorialized nature of flows of capital (Coole and Frost 2010), the shipping container points to the physically tangible nature of much of worldwide trade and mobility. Moreover, through its use as refugee housing, it physically embodies some of the consequences of these global flows – poverty, war and displacement.

While the Dutch producer of inhabitable containers refers to the ISO container as ‘our most sturdy and durable solution’ (TempoHousing n.d), shipping containers do not facilitate ‘durable solutions’ in the sense of the UNHCR – local integration, resettlement to a third country or voluntary repatriation. The shipping container’s basic physical qualities make it stable enough to protect what it contains in the short term, but flexible and impermanent enough to be moved when required. It is therefore ideal for facilitating transitions in a variety of situations and contexts. Goods and people can be moved and (re)distributed across space swiftly, but they can also be stored or warehoused in an already-protected environment until longer-term solutions are found. Yet we have seen that the temporary presence of large numbers of containers can also initiate longer-term urban changes, as the surrounding socio-spatial arrangements are affected. As refugee shelter, the shipping container’s dual qualities (mobile/durable, temporary/stable) make it an interstitial form of housing, both spatially and temporally. While it allows for individual or family occupancy (unlike emergency reception centres), it is still a ‘collective’ form of accommodation – with the lives of large groups of refugees managed by an agency rather than self-determined. Indeed, the size and scope of the MUFs, which will house up to 30,000 refugees across fifty-three sites, suggest that there is no long-term plan to disperse all refugees into individual accommodation. Like other forms of temporary shelter, the shipping container is a space for awaiting longer-term solutions.

In the German context, these qualities of the shipping container allow the state to respond flexibly – fulfilling its basic obligations of shelter provision and setting a potential path to local settlement, without committing to long-term housing and integration. The easy disassembly, movability and reuse of the shipping containers, as well as the possibility of repurposing medium-term modular housing, mean that no excessive spatial commitments have been made; large numbers of refugees can easily be moved to a different city district, federal state or European country, or can even be refouled. In light of the shifting policy vis-à-vis refugees on various political scales, such a spatially and temporally flexible approach to refugee shelter should perhaps not be understood as a failure to respond quickly, but rather as a ‘rational’ response from the point of view of a state keeping its spatial options open.

Despite the specificities of the shipping container as a standardized form, what we might call the ‘container model’ of refugee housing permeates many of the official responses to sheltering displaced people. These types of mobile infrastructures, which can barely be called housing, enable survival, but not living. They protect those inside from what lies beyond, but also contain them, limiting their ability to develop ties to adjacent areas. Continuously transmitting the embodied message not to get too comfortable in a given location, their very materiality asserts their temporariness, their capacity to uproot inhabitants again at short notice.

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## Notes

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<sup>i</sup> The standard shipping container, following ISO 668, is approximately 2.4m (8 feet) wide and 2.6m (8.5 feet) high, with a length of either 6 m (20 feet) or 12.2 m (40 feet). So-called ‘hi-cube’ versions follow the same measurements except that they have a height of 2.9 m. The corner locking mechanism that enables lifting and stacking follows ISO 1161. ISO 6346 specifies standards for coding and marking shipping containers. See Levinson (2006: 137–49) for details on the process of standardization.

<sup>ii</sup> As stipulated by law: Baugesetzbuch (BauGB) § 246 Sonderregelungen für einzelne Länder; Sonderregelungen für Flüchtlingsunterkünfte